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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/720,350

11/25/2003

Sang-Ho Lee

P24468

3895

7055 7590 04/17/2009  
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EXAMINER

LEE, MICHAEL

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

04/17/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/720,350	<b>Applicant(s)</b> LEE, SANG-HO	
	<b>Examiner</b> M. Lee	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4,7-9,18,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 7-9, 18, 25, 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Previous finality office action is withdrawn from consideration in view the following new ground of rejection.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art admission, Figures 1-5, in view of Hovey (2,042,002).

Regarding claim 18, the admitted prior art shows a low-surface chassis (20), a slide chassis (30), a back-and-forth motion member (60), a motor (53), a bracket (21), a main printed circuit board (15), a secondary printed circuit board (11), an inherently included connector on the circuit board 11, and an inherently included cable. The last two elements are inherently included in the admitted prior art because the circuit board 11 and the main control circuit 15 must be connected together by some electrical wiring means in order to communicate with each other. However, the admitted prior art fails to disclose the reinforcing brackets as claimed. It is recognized that, without reinforcing brackets, the slide chassis of the admitted prior art is prone to suffer from torsional distortions due to the number of openings. Hovey teaches the use of c-shaped metal reinforcing brackets to stiff a sheet metal (note Figure 6) and to eliminate torsional

distortions. Hence, it would have been obvious to one of ordinary skill in the art to include reinforcing brackets into the admitted prior art so that the unwanted problems could be avoided.

3. Claims 4 and 7-9, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art admission, Figures 1-5, in view of Hovey, and further in view of Bigler et al. (5,912,541), further in view of Hovey.

Regarding claims 4 and 7-9, and 25-26, in addition of rejection to claim 18 as set forth above, the admitted prior art also fails to show the secondary circuit board which is attached to one side of the motor as claimed. Instead, the secondary circuit board is coupled to the motor through a metal bracket. Bigler, from the similar field of endeavor, teaches a DC servo motor integrated with a controller circuit (note Figure 1). Bigler states that the benefits of the mated, modular controller 49 and motor body 40 are numerous (note col. 6, lines 52-62). Complete elimination of the need for local hand wiring reduces cost and increases reliability. Elimination of the necessity of mounting the separate components saves money, time and space. Elimination of the need to match, procure and inventory separate components adds to this savings. Elimination of potentiometers and other analog settings removes servo engineers from assembly lines and assures uniformity across different units and over time. Since the motor and control circuit setup of the admitted prior art nonetheless suffers from the similar problems as mentioned in Bigler, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the admitted prior art to include the integrated servo motor control of Bigler so that unwanted problems could be avoided.

With the control circuit integrated into the motor body, the motor can be inspected directly user without removing any circuit board.

***Response to Arguments***

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran, can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/M. Lee/  
Primary Examiner  
Art Unit 2622

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